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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/406,170	09/23/1999	VARADARAJAN SRINIVASAN	02489.P015	1319
30554	7590	09/20/2005		
SHEMWELL GREGORY & COURTNEY LLP 4880 STEVENS CREEK BOULEVARD SUITE 201 SAN JOSE, CA 95129				
			EXAMINER BLOUNT, STEVEN	
			ART UNIT 2661	PAPER NUMBER

DATE MAILED: 09/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/406,170

Applicant(s)

SRINIVASAN ET AL.

Examiner

Steven Blount

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 June 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 65 - 75 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 65 - 75 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 65 - 75 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Applicants Admitted Prior Art (AAPA) in view of U.S. patent 4,996,666 to Duluk Jr et al.

With regard to claims 65 - 72, AAPA states on page 5 lines 15+ that:

“When a policy is changed by adding a new policy statement that has a higher (or equal) priority than at least one of the policy statements already stored in CAM array 304, the table management hardware and software needs to reprioritize or reorder all or part of CAM array 304. This is typically accomplished by reloading the CAM array with a new prioritized group of policy statements. This can add significant overhead to the router (e.g., delay and additional hardware and software) to change even just one policy statement in a given policy. If the table is not reloaded, CAM 302 may cause an incorrect route to be selected from memory 308”.

Thus, AAPA states that if a policy statement is added to the matrix, in order to maintain proper order, the step of reordering the entire matrix is next required. However, this further step “adds significant overhead”, and that it would be desirable to be able to

“add a new policy statement to a policy without reloading the CAM array storing the policy statements.”

Duluk Jr teaches segmenting a data word into a plurality of subfields, and performing a comparison on each subfield separately in col 11 lines 22+. Duluk also teaches that as a result of the comparison, data may be written. See col 11, lines 18+. Duluk Jr also teaches in col 11 lines 50+ that the comparison may be of the form of greater than (or equal to), equal to, or less than (or equal to). See also col 18 lines 10+

It would have been obvious to one of ordinary skill in the art at the time of the invention to have added the policy statement of AAPA to the CAM array of AAPA and then reprioritized the priority number fields of AAPA alone and without reordering the entire CAM array, in light of the teachings of Duluk Jr, in order to provide a more efficient means to “add a new policy statement to a policy without reloading the CAM array storing the policy statements.”

With regard to claims 73 – 75, see the above and note that it would equally apply to deleting a policy statement from a plurality of policy statements as well.

### **REMARKS**

3. The examiner disagrees with applicants assertion that the material discussed in the background of the invention is not prior art. For example, on page 3, the applicant states that “A policy - based router can use a content addressable memory (CAM) – based system to implement a filtering or classification function to determine whether an incoming packet matches a policy statement.” The examiner notes that the material is labeled as “background”, and the discussion of the technology in this section is

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generally in the past tense, such that one of ordinary skill in the art reading this portion of the specification would realize that it is a discussion of the prior art and is setting the stage for a discussion of the applicants invention.

The examiner notes that Duluk Jr is a long and complicated disclosure, the most pertinent aspect of which for purposes of this action is a discussion of how the data word is segmented into discreet fields for individual comparison. This is in accordance with applicants invention, which is (again) the segmentation of the policy statement from the priority value such that the reordering may occur within a separate subfield without having to move the entire block of individual data. For the reasons given above, the examiner believes it would have been obvious to carry out this reorganization on the individual subfields of AAPA in view of this teaching of Duluk Jr.

4. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

Or, the response may be faxed to: (703) 872-9306.

For formal communications intended for entry, or for informal or draft communications, please label "PROPOSED" OR "DRAFT".

Any inquiry concerning this communication should be directed to Examiner Steven Blount, whose telephone number is (571) 272 – 3071.

Examiner Blount may normally be reached Monday through Friday between the hours of 9:00 and 5:30. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's Supervisor, Mr. Chau Nguyen, may be

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reached at 571 – 272 - 1980.

  
**Ajit Patel**  
**Primary Examiner**

SB  
  
9/9/05